



The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

100 Cambridge Street, Suite 900

Boston, MA 02114

Deval Patrick
GOVERNOR

Timothy Murray
LIEUTENANT GOVERNOR

Ian Bowles
SECRETARY

February 8, 2007

Tel: (617) 626-1000
Fax: (617) 626-1181
<http://www.mass.gov/envi>

RECORD OF DECISION

PROJECT NAME : Long-Term Control Plan
PROJECT MUNICIPALITY : Lowell
PROJECT WATERSHED : Merrimack
EOEA NUMBER : 12059
PROJECT PROPONENT : City of Lowell
DATE NOTICED IN MONITOR : December 23, 2006

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.10 of the MEPA regulations (301 CMR 11.00), I hereby **grant** a Phase I Waiver to allow an initial phase of the project to proceed, pending the preparation of a Final Environmental Impact Report (FEIR) for the project.

PROJECT DESCRIPTION

The City of Lowell's existing sewer system provides wastewater collection and treatment to sanitary and stormwater flows from the City of Lowell. The system is comprised of approximately 220 miles of sanitary and combined sewers, pumping stations, and flood control pumping stations, 9 Combined Sewer Overflow structures (CSOs), 4 main interceptors, and a Waste Water Treatment Facility (WWTF) with a designed secondary treatment capacity of 52 million gallons per day (mgd). Seven CSOs discharge to the Merrimack River, 1 CSO discharges to the Concord River, and 1 CSO discharges to Beaver Brook during storm events.

CSO discharges from the City of Lowell continue to cause violations of water quality standards even in the absence of other pollutant sources and discharges. The City of Lowell's Draft Long-Term CSO Control Plan indicates that the City currently discharges a total of 352 million gallons per year (mgpy) of untreated combined sewer overflow to the Merrimack River (94.5 mgpy), the Concord River (202 mgpy), and to Beaver Brook (55 mgpy).

The project involves the development and implementation of a Long-Term Control Plan (LTCP) to address the impacts associated with the control and abatement of the City of Lowell's combined sewer overflows (CSO) within the City of Lowell's sewer system.

The City of Lowell entered into a 1988 Consent Decree with the United States Environmental Protection Agency (USEPA) and the Department of Environmental Protection (MassDEP) which requires Lowell to abate its CSO discharges and to bring the City's combined sewer system into compliance with the City of Lowell's National Pollutant Discharge Elimination System (NPDES) Permit, and applicable state water quality standards. The USEPA issued an Administrative Order (AO) to the City of Lowell in June 2003 to proceed immediately with the design and construction of specific components of the LTCP including the sewer separation of portions of the combined sewer system in the Warren Street CSO drainage basin, prior to the completion of the final LTCP and the MEPA EIR process. This NPC project would enable the proponent to comply with the USEPA's AO requirements.

Project History

The City of Lowell filed an Environmental Notification Form (ENF) in October 1999 for the development of a long term plan for the control of CSOs for the City of Lowell with a specific focus on nine locations where CSOs discharge to the Concord and Merrimack Rivers and Beaver Brook which have been found to cause or contribute to violations of water quality standards. The City requested a Phase I Waiver to allow the City to proceed with the proposed Humphries Brook sewer separation designed to remove inflow from a large drainage area tributary to Humphries Brook. The scope of the DEIR, established in the ENF Certificate issued November 29, 1999 requested the DEIR to include a description of the City of Lowell's existing CSO system, to identify and analyze available CSO control and abatement alternatives and assess their respective costs and benefits, and to recommend a specific long term CSO control and abatement plan that will meet federal and DEP CSO policies and guidelines, within the City's financial capability limits.

In the DEIR filed with the MEPA Office in March 2002, the City described its preferred alternative Long Term Control Plan (LTCP) for CSO control including the implementation of a number of CSO abatement projects over a ten year period, with a total estimated cost of \$23 million dollars, which will result in the reduction of the average annual CSO volume from 352 million gallons per day (mgpd) to 277 mgpd.

The preferred alternative was described as best addressing both wet weather water quality improvements and the need for in-system remedies, and included:

- construction and operation of remote CSO diversion facilities;
- upgrades to the existing wastewater treatment plant to increase wet weather capacity;
- sewer separation in the Varnum Avenue area;
- improvements to the Tildon Street CSO facility;

- providing in-line storage at or near the Beaver Brook CSO facility;
- implementation of phases of the NPDES II Stormwater Management Program;
- participation in the Merrimack Study; and
- annual commitments to limited sewer separation and infiltration/inflow (I/I) removal projects.

In further negotiations with the regulatory agencies, the City agreed to modify the “preferred” alternative to a Phase I CSO control plan to include:

- construction and operation of remote CSO diversion facilities;
- upgrades to the existing wastewater treatment plant to increase wet weather capacity;
- \$40 million in sewer separation work in the Warren St. CSO area;
- implementation of phases of the NPDES II Stormwater Management Program; and
- participation in the Merrimack Study;

Notice of Project Change (NPC)

In February 2001, the City of Lowell submitted a Notice of Project Change (NPC) to install a new stormwater collection system in the Varnum Street area, and to construct modifications to the existing Wastewater Treatment Facility (WWTF), prior to the completion of the EIR. A Final Record of Decision (ROD) was Secretary’s Certificate on the NPC was issued in March 2001. According to the proponent, these projects have been completed. A second NPC was submitted to the MEPA Office in September 2003 to modify the Merrimack, Tilden Street, Read Street, and Beaver Brook CSO diversion structures to increase their respective wet weather flow capacity, and to construct improvements to the grit handling facilities at the Lowell WWTF. The City also proposed to install new sewers along Sparks Street. These projects have also been completed. A third NPC was submitted to the MEPA Office in July 2005 to install new sewer separation and storm drains in the Gorham Street South, Newhall Street South and Weed Street drainage areas which comprise a portion of the Warren Street CSO Basin.

The 3rd NPC also included the construction of sewer separation in the Sixth Avenue and Emery Avenue local drainage area which comprises a portion of the tributary to the Beaver Brook CSO Diversion Structure, and which was delegated as a CSO priority by the city after preparation of the LTCP, and subsequently approved by MassDEP. An ROD was issued on the third NPC was issued in August 2005. The Sixth/Emery Avenue drainage system is being constructed and should be completed by Summer 2007. According to the proponent, construction of the Weed Street drainage system is anticipated to be completed in 2009. Bidding for the Wellman Street drainage area work, the subject of the June 2005 NPC, is expected to be completed in Fall 2007.

4th Notice of Project Change (NPC)/ Phase I Waiver Request:

Pursuant to Section 11.11 of the MEPA Regulations, the proponent is requesting a Phase I Waiver to construct new stormwater drains and sewer pipe (Sewer Separation) in the Wellman Street and Industrial Avenue drainage area which is located within the 175-acre Warren Street CSO Basin. This Warren Street CSO Basin Sewer Separation work was presented as a component of the City of Lowell's overall Long Term Control Plan/EIR submittal to the MEPA Office in October 1999. This City of Lowell proposes to mitigate combined sewer overflows by installing approximately 19,000 lf of new drain pipe and sewer pipe mostly within the City's existing roadway right-of-ways, which will result in separation of the storm drains and sewers in the project area. A portion of the proposed new drainage system will involve the cross-country construction of approximately 1,650 lf of drain pipe (60"– 66" diameter pipe) to convey stormwater flows from the drainage basin in a southeasterly direction to a new headwall outfall structure that will discharge directly to the River Meadow Brook. The new sewer system will also involve the cross-country construction of approximately 1,600 lf of new sewer pipe from Wellman Street north to Newell Street. According to the information provided in the NPC submittal, a small segment of the City's proposed sewer separation project (approximately 1,600 lf of new 12" sewer pipe) will be privately constructed as part of a redevelopment proposal (EOEA #13943) for a 26.83-acre parcel of property located at 790 Chelmsford Street in Lowell.

Section 11.11 of the MEPA regulations provides that the Secretary may waive any provision or requirement of 301 CMR 11.00 not specifically required by MEPA, and may impose appropriate and relevant conditions or restrictions, provided that the Secretary finds that strict compliance with the provision or requirement would: (a) result in an undue hardship for the proponent, unless based on delay in compliance by the proponent; and (b) not serve to avoid or minimize Damage to the Environment.

In the case of a partial waiver of a mandatory EIR review threshold that will allow the proponent to proceed with phase one of the project prior to preparing an EIR, the Secretary, at a minimum, must base this finding on a determination that:

1. the potential impacts of phase one of the project, taken alone, are insignificant;
2. ample and unconstrained infrastructure facilities and services exist to support phase one of the project;
3. the project is severable, such that phase one does not require the implementation of any other future phase of the project or restrict the means by which potential environmental impacts from any other phase of the project may be avoided, minimized or mitigated; and,

4. the agency action on phase one will contain terms such as a condition or restriction in a permit, contract or other relevant document approving or allowing the agency action, or other evidence satisfactory to the Secretary, so as to ensure due compliance with MEPA and 301 CMR 11.00 prior to commencement of any other phase of the project.

Findings

I have carefully reviewed the Phase I Waiver Request, supporting documentation, and written comments.

1. As described by the proponent, this phase of the City of Lowell's Long Term Control Plan project will involve the separation of the City's existing combined sewer system by installing approximately 19,000 lf of new drain pipe and sewer pipe mostly within the City's existing roadway right-of-ways located in the Wellman Street and Industrial Avenue drainage area of the 175-acre Warren Street CSO Basin. The project will involve construction of approximately 1,600 lf of cross-country extension of the City of Lowell's 12" sewer main and approximately 1,650 lf of new cross-country 60" stormwater drain pipe, and will result in minor impacts to environmental resource areas including; bordering vegetated wetlands (BVW), Inland Bank, Riverfront Area and Bordering Land Subject to Flooding.

The City's construction of the cross-country portion of the proposed new 60" drain line and new 66" River Meadow Brook headwall outfall structure will result in impacts to approximately 20-40 lf of inland bank, 1,000 sf of Riverfront Area and Bordering Land Subject to flooding.

A segment of this cross-country sewer construction (approximately 1,100 lf) is located on a 26.83-acre privately owned parcel of property (790 Chelmsford Street) which contains BVW resource areas. The construction of this cross-country segment of sewer pipe may impact a small amount of wetland buffer area. I note that the proponent for the Lowell Connector Park Redevelopment project has committed to privately construct this cross-country segment of sewer pipe as part of the redevelopment project proposal (EOEA #13943).

2. According to the proponent, the project has been designed to meet DEP's Stormwater Management Policy standards and practices. The proponent will need to employ appropriate erosion and sedimentation control measures during project construction;

3. The project will require approval from the Department of Environmental Protection (MassDEP). I anticipate that MassDEP's review and approval process will contain terms such as a condition or restriction so as to ensure due compliance with MEPA and 301 CMR 11.00; and,
4. The City of Lowell is proceeding with the Phase I CSO abatement work in accordance with the existing AO. MassDEP and USEPA will also be meeting with the City of Lowell to discuss the development of a Phase II scope of work and schedule for the implementation of Phase II of the City's LTCP. I will require the City to provide the MEPA Office with an LTCP progress report pertaining to the City's Phase I CSO abatement work, and the City's development of a Phase II scope of work and a proposed schedule for the implementation of the Phase II LTCP.

Based on these findings, it is my judgment that the phase one waiver request does have merit, does meet the tests established in 301 CMR 11.11, and will serve to advance the interests of the Massachusetts Environmental Policy Act. I hereby grant the Phase I Waiver subject to the aforementioned findings and conditions.



Ian A. Bowles, Secretary

February 8, 2007

DATE

Comments received on the DROD: None

4th NPC/ROD #12059
IAB/NCZ/ncz